stitutional treatment is vastly more important than either iridectomy, or any possible advantage from local medication.

In an eye from which the lens has not been removed, conditions similar to those described in the case of Mrs. K. could not, in my judgment, be overcome without iridectomy. In an aphakial eye abundant experience shows that iridectomy can accomplish no good purpose and is wholly unnecessary, even in the presence of an acute inflammatory glaucoma.

To briefly sum up the points I desire to make, it will be necessary to keep in mind the clinical features. My conclusions briefly stated are as follows:

1. Incipient glaucoma is frequently relieved by improved nutrition, with correction of any existing errors of refraction. It is sometimes relieved by the iodid of potassium, associated with the local use of eserin drops.

2. Mild and insidious cases of inflammatory glaucoma, between paroxysms, may exhibit but little tension. They require iridectomy for the drainage of the engorged vessels during the paroxysm, and constitutional treatment to aid in the elimination of accumulated débris in the tissues.

3. Inflammatory glaucoma, excluding the traumatic cases, should be accepted as a manifestation of rheumatic diathesis; and, while iridectomy should constitute a necessary part of the treatment, it should not be relied upon to the exclusion of the all-important constitutional measures. I do not think iridectomy should ever be done as a prophylactic measure simply.

4. Since iridectomy can accomplish nothing beyond the establishment of drainage for the vessels of the iris and contiguous structures, into the aqueous chamber, the amount of iris removed should be small. The operation should not be repeated in any case. Supplemental constitutional treatment is imperatively demanded in every case where iridectomy is done.

5. In all cases of increased tension of the eye, with peripheral contraction of the field, engorgement of the retinal veins, with or without visible cupping of the disc, constitutional treatment is necessary; and, above all, strict attention to the state of general nutrition and habits of the patient.

SECONDARY GLAUCOMA.

Presented in the Section on Ophthalmology at the Forty-eighth Annual Meeting of the American Medical Association, held at Philadelphia, June 1-4, 1897.

BY S. D. RISLEY, M.D.

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PHILADELPHIA, PA.

It is probable that under the title of this paper might be quite correctly classified all classes of inflammatory glaucoma whether acute or chronic. There would then remain a comparatively small, illy defined group of cases of a non-inflammatory type to be designated as simple or primary. Increasing clinical experience has surely taught that the increased tension of the eyeball, the insensitive and steamy cornea, the impairment of peripheral and central vision is a group of symptoms frequently occurring as a resultant of widely diverse pathologic processes. For example, we find this important and interesting symptom-group as a sequel to hemorrhagic retinitis, or to chronic but steadily advancing disease of the uvea in gouty subjects. We meet it again in cases of dislocated lens, or following large rents in the lens capsule caused either by discission operations or by accidental traumatisms, which cause a rapid swelling of its substance and speedily loading of the aqueous with the dissolved cortex: It not infrequently presents itself as a part of the closing scene in the destructive processes which characterize plastic iridocyclitis, fiercely attacking, as they do, the anterior segment of the globe, or in uveitis, which involves usually the entire uveal tract. In all of these widely differing conditions the glaucoma group of symptoms occurs as a sequel, probably never as a primary or initial condition.

I do not propose to discuss these suggestions in all their bearings, but simply to give briefly the history of two cases which illustrate widely diverse types of disease, each leading up finally to the symptom-group we call glaucoma.

Case 1.—Plastic iridocyclitis, annular synechia, and occlusion of pupils. Secondary glaucoma, iridectomy; recovery with moderate vision.

W. W., colored man, aged 32 years, came to the Wills' Eye Hospital, June, 1894. He had suffered from an attack of iritis, probably syphilitic, in 1884, since which time he suffered frequent attacks of pain and redness of the eyes, for which he had received no treatment. His vision had gradually failed until he found it difficult to do his work, that of a farmer. During these years he had suffered from frequent attacks of headache, which had lately become constant, and his vision was often so poor that he could with difficulty find his way about in strange places. O. D. V. large letters at 1 m., but was often much worse. O. S. V. q. p. l.

The following conditions were noted: O. D. pupil small; annular synechia; anterior capsule gray; anterior chamber shallow and angle closed by adherent iris. Tension 1. Slight ciliary injection; no study of fundus possible; contracted field of vision. O. S., same general conditions present, but pupil was in addition occluded by a mass of exudate. The iris was pressed forward and was lying apparently in contact with the cornea, the pupil lying in the apex of a funnel-like depression. The ball was soft. He was placed on mercurial inunctions and eserin; potas. iod. in ascending doses internally. This treatment was maintained until the latter part of September. During this time, although his health improved, he suffered severely from headache and had repeated attacks of increased tension in both eyes. His vision grew rapidly worse, so that he was led to the clinic by his wife, and the candle fields were contracted to a few degrees. He was then admitted to the hospital and a broad iridectomy made upward in both eyes. It was impossible to carry the point of the keratome between the cornea and iris. It was therefore entered well back and penetrated the posterior chamber, being brought forward through the iris into the anterior chamber near the pupillary border, care being exercised to avoid the lens. A quantity of viscid yellowish fluid exuded from the wound. The iris forceps were introduced and seizing the iris at the cut portion near the pupil was gently drawn out of the wound in the reverse order from that ordinarily employed. It was found sufficiently tough to bear traction in the right eye, but very friable in the left, so that it was taken away in fragments, but a large coloboma was secured in each, which fortunately remained open. The eyes healed promptly but continued red and irritable for many weeks. The anterior chambers resumed their normal depth and both balls became soft. The headache promptly disappeared and he was soon able to see his way about the ward.

After six weeks he was discharged from the hospital with sufficient vision to be able to go home without a guide, and became an out-patient. Potas. iod. and bichlorid of mercury alternating with iod. of iron were continued with more or less regularity for a year or more, with local washes, atropin and weak solution of eserin. He has never had any recurrence of headache, or pain or redness of his eyes, and the tension of the balls has steadily improved. He attends the clinic without a guide and is able to resume his work about the farm.

Case 2.—Uveitis, secondary glaucoma.

Sept. 9, 1894, R. W. presented himself at the Wills' Eye

Hospital for treatment. He was suffering from dull headache and photophobia. He related that the left eye became red and painful during the summer of 1894, and had been under the care of his physician for a long time before he observed failing vision in the right. He denied syphilitic infection at any time, but was evidently in ill health and of a so-called strumous diathesis.

The pupils were dilated with atropin prescribed by his physician. The following objective conditions were noted: In O. D. there was some ciliary injection, the epithelial surface of the cornea was normal, but the posterior surface was dotted with numerous gray points which were arranged in a more or less triangular form in the lower part of the membrane of Descemet. The anterior chamber had normal depth, but the aqueous humor was slightly turbid. Viewed through this and the deposit on the cornea, the iris seemed to lack luster and its surface presented an apparently smooth uniform surface. The pupil was dilated; large medium and no synechia were present. Only a veiled view of the fundus could be obtained. There were floating vitreous webs, and the nerve borders were lost in the surrounding infiltration of the fundus. T. = n. V. = 6/xii. Field for form normal.

In O. S. there was more pronounced ciliary injection. The cornea was found steamy throughout and at its lower part a large crescentic area extending from the limbus to a point near the horizontal meridian of the cornea, exhibiting deep gray infiltration over which the cornea appeared flattened, but the epithelium was intact.

The anterior chamber had apparently normal depth. The pupil was small, its margins partially adherent to the anterior capsule was gray. V. = 6/xxx, slight minus tension. No satisfactory study of the eye ground could be made.

He received potas. iod. and corros. sub., with tonics, internally and atropia locally. By November 11 the eyes had lost their injection and dread of light and his headache was better, but vision in O. D. had fallen to 6/xv and small slender synechia had formed, and the vitreous degeneration had also advanced. In O. S. V. 6/xlviii; tension and fields were normal in each eye. The atropia was stopped. On November 23 the corneæ were steamy and vision had fallen to 6/ix in each, and severe pain in the eyes came on daily, after noon, for which he received eserin locally and antiperiodic doses of quinin. There were transient attacks of increase of tension, but these would disappear after massage and instillation of eserin, even while waiting in the clinic room. The eserin alone however was not well borne, the eye often doing better under atropin, or the two drugs used alternately. He would have intervals often extending over many days of freedom from pain, during which the haze of the cornea would be absent and the vision would improve; then suddenly, and without known provocation, the symptoms would return with marked increase of tension, which could always be speedily relieved by manipulation and eserin. The case progressed until Feb. 11, 1895, when under an unusually severe exacerbation of acute glaucoma, vision fell to the ability to count fingers with difficulty, corneæ steamy and insensitive, T. + 1. Severe pain, anterior chambers normal depth.

He was admitted to the Hospital, placed on mercurial inunction, eserin and light massage. Under this treatment, with extra diet and tonics, the glaucoma rapidly disappeared and vision once more came up, but there was marked cut in the lower temporal fields of both eyes.

On March 6 the eyes were nearly white again, and although there were transient attacks of increased tension, the eyes were free from pain. On March 12, 1895, the fields were found as shown in Fig, 2, *a* and *b*. O. D. V. = fingers only. O. S. V. = 5/lx. A broad iridectomy was then made in the right eye. The recovery was rapid and without reaction, and in four weeks V. = 4/lx. On April 1 an iridectomy was made on the left eye, which also recovered without reaction, and the man was discharged from the hospital on April 15, 1895, with both eyes white, the fields of vision nearly normal. T. — 1. O. D. V. = 4/lx. O. S. V. = 4/lx. No satisfactory study of fundus possible, cornea clear, except lower quadrant in the left eye. There was no return at any time of increased tension, but there were repeated attacks of bullous keratitis in both eyes, during the following summer and autumn. The eyes, however, finally became quiet, A year later, March, 1896, V. had fallen to 1–60 in O. D. from commencing opacity of the lens. O. S. had risen to 6/xlviii. In April the right ball was soft, lens opaque, q. p. l. shallow anterior chamber. O. S. V. 6/xlviii and white T. — 1. in each eye.

The history of these patients is presented as illustrative of two essentially different groups of patients, both unfortunately very common, but, in the opinion of the writer, of great interest because they shed much light upon the etiology of increased tension. In both cases was witnessed the steady progress of disease culminating in all the signs of inflammatory glaucoma. Increased tension, steamy and sensitive corneæ, and contracted field of vision, all the symptoms being promptly relieved by iridectomy. Nevertheless they present few if any other features in common. In Case 1 was present all the conditions of a plastic iridocyclitis, viz., an acute iritis followed by frequent recurrence of milder or subacute exacerbations, leading to annular synechia, occlusion of the pupils, infiltration of the iris and ciliary body, with the products of inflammation, copious exudate imprisoned behind the iris, which was pressed forward by its accumulation, effectually blocking the spaces of Fontana and thus closing the excretory channels at the angle of the anterior chamber.

In case 2 we have presented a history which differs from case 1 in all essential particulars. The marked tendency to a plastic exudate is absent. Only a thread-like synechia was formed. The onset of the disease was insidious and steadily progressive, attacking first the left eye and after many weeks spreading to the right, where the first manifestation was that of dimness of vision, which proved to be due to an infiltration of the retina and choroid at the posterior pole which blurred the optic nerve margins and veiled the details of the fundus; then degeneration of the vitreous body, shown first by a sand-like deposit and later by webs which as the disease advanced became more dense and floated more and more freely, while the acuity of vision rapidly declined. Then came deposits on the posterior surface of the cornea from the aqueous, which became turbid from the increasing exudate. Not until this stage of the disease was reached was there observed any tendency to increase of tension. At no stage of the affection was the anterior chamber shallow, or the angle closed by the periphery of the iris; at no time was there any arrest of communication between the posterior chamber and the spaces of Fontana. Nevertheless as in case 1, we observed, late in the disease, the increased tension, the steamy and insensitive corneæ, the contracted fields of vision, also relieved by iridectomy never to return.

It is obvious that from the start to finish we have two essentially different types of disease portrayed in the history of these two patients, both, nevertheless, culminating in a common group of symptoms depending upon a mechanical condition which required for its relief the same mechanical interference. Many important and interesting inquiries present themselves for discussion, especially in case 2. First, in both interest and importance, is the nature of the disease in the right eye. Was it idiopathic, or was it secondary to that in the left eye which was first involved, and probably due primarily to an abscess in the lower part of the cornea?

In the second eye the disease certainly manifested itself first in and around the papilla and subsequently spread forward gradually manifesting all the conditions ordinarily present in so-called sympathetic ophthalmia of the serous type.

In case 1 the increase of tension was obviously due to the exudates and fluids imprisoned behind the iris and by the closure of the angle of the anterior chamber. In case 2, it is probable that the anterior excretory channels were clogged by the profuse albumin-

ous exudate. This view seems to find corroboration in the relief which was frequently afforded by massage.

DISCUSSION ON PAPERS OF DRS. REYNOLDS AND RISLEY.

Dr. ALLPORT of Chicago—In discussing the paper of my friend, Dr. Reynolds, and while agreeing with him in the general trend of thought contained within its pages, I can not but feel that his loyal, broad and radical nature has been led into certain positive statements that are hardly warranted by the condition of modern ophthalmologic thought. For instance, he utterly surrenders to the rheumatic or gouty theory of glaucoma. I would not be understood as ignoring this important and suspicious etiologic factor, as we are doubtless all firm believers in its potency, but I am not prepared to accept the sweeping assertion that the production of glaucoma is dependent upon two factors, viz., lithemia and traumatism. Time and research may, it is true, verify this bold position, but I am at present unacquainted with scientific data upon which to build such an etiologic structure. The lithemic theory of pathology is now ascendant, not only in ophthalmology, but in other branches of medical science, and like other theories, is in danger of too great popularity; and while not desiring to decry its claims, I would like to be confident that ophthalmology may not be compelled to retrace its steps.

Dr. Reynolds' theory of the cause of benefit derived from iridectomy is unique. He evidently believes that glaucoma is purely a vascular disease and has nothing to do with abnormal secretion or excretion. He may be correct in his views; it is unbecoming in any one to disregard the opinions of others, but surely this is not the pathology entertained by modern ophthalmologists.

Dr. Reynolds attributes the benefit derived from iridectomy to the mere production of a cut iritic surface which permits of vascular drainage through the iritic blood vessels. If this were true, a simple incised wound of the iris would answer the purpose as well; and how can we account for undoubted (*if* infrequent) beneficial results following the operation of sclerotomy? I had supposed that the usefulness of a broad iridectomy in these cases resided chiefly in the tearing away of the obstructive, adherent iritic periphery from the posterior corneal circumference, thus re-establishing the lymphatic circulation coming *from* the ciliary body, zonula, posterior and anterior chambers and going *to* the canal of Schlemm, spaces of Fontana, and onward. If this is true (and it appears to be the present accepted theory), then Dr. Reynolds' idea of a small iridectomy would be at decided variance with it. We all feel that a large broad iridectomy is the proper operation, as the broader the detached base, the more thoroughly will those obstructions be removed which militate against the maintenance of ocular, excretory equilibrium.

Dr. Reynolds says that iridectomy is of itself never a permanent curative agent. He may be right in this view, but I am sure we can all of us point to cases where a timely iridectomy has proven curative, at least for many years. Such results must surely have occurred, many years ago, before the deadly lithemic diathesis was discovered, or iridectomy would not have become so popular with Graefe and his followers.

Dr. Reynolds certainly holds optimistic views concerning the constitutional treatment of glaucoma, and I must congratulate him on the excellent and exceedingly prompt results obtained in his cases, which I can quite readily comprehend, not only because they are vouched for by my friend Reynolds, but because I have seen similar cases in my own practice. I feel, however, that we should be careful not to pronounce cases of glaucomatous tendencies as true glaucoma, and thereby perhaps establish lines of erroneous therapeusis. Still, I have not the slightest doubt that the sensible treatment advocated by Dr. Reynolds is often of the greatest benefit in *functional* glaucoma, before organic changes have occurred, and I believe that in almost all cases such or similar treatment should be thoroughly tried before subjecting the patient to the knife.

Dr. F. C. HOTZ of Chicago—Dr. Risley's report is an excellent illustration of the futility of the attempts to discover the complex, pathologic symptoms leading up to glaucoma. If we still consider increase of tension as the fundamental symptom, we must necessarily conclude that this may be caused by increased secretion into the eye or diminished excretion from it. We all know that one of the theories is based upon a mechanical obstruction in the iris angle. Among the cases Dr. Risley reported, one illustrates a mechanical impediment interrupting the removal of the fluid from the spaces of Fontana by blocking up the pupil. As to the other theory, which puts the obstruction in the iris angle, I have never been able to make up my mind to accept it and I think all the observations made and reported of old glaucomatous eyes are very deficient in their conclusive evidence, because in all the eyes examined changes had occurred which had nothing to do with the primary condition leading to the increase of tension, and if we especially consider those cases of so-called secondary glaucoma we are more and more led to look upon the ciliary processes producing the increased secretion as the seat of pathologic change leaning to increased tension.

Glaucoma, or increased tension, following needle operations as mentioned by Knapp, and increased tension following traumatisms in the anterior part of the eye, show more or less symptoms of irritation in the ciliary region and in this connection I consider the researches of Treacher Collins of great importance. He thinks that the ciliary processes are glandular structures and if these observations are confirmed, we have a very important discovery, because these glands might easily answer for the increased secretion of serum into the eyeball as the result of an irritative condition.

Dr. LUCIEN HOWE of Buffalo—I was very much struck by what a gentleman said to me several years ago, that at regular intervals, two or three times a year, he received articles on glaucoma and he usually noticed that the less the author had of experience, the longer the articles were. I do not mean that the papers we have listened to have not given us a flood of light upon some of the points, but we are too apt to be led into this or that theory that has not a sufficient number of facts upon which to stand. I want to mention two things bearing upon these papers. My attention was called some time ago to the extract of the suprarenal capsule for lessening that kind of injection. It is of decided value. The preparation lasts a very short time unless it be made into tablets, which can be easily prepared. Another point I wish to call attention to is the use of eucain as a local anesthetic, especially where atropin causes the iris to almost disappear. It produces anesthesia and does not produce dilation of the pupil.

Dr. C. A. WOOD of Chicago—There is one aspect of secondary glaucoma which it would be well to bear in mind, and that is its tendency to assume forms which it is extremely difficult to differentiate from secondary optic nerve atrophy, associated with physiologic cupping of the papillæ. A unilateral cupping, sufficiently deep and large to hide the papillary portions of the retinal vessels, is practically always significant of glaucoma whether the other signs or symptoms of the disease be present or not, but in the bilateral cases, unless there are unequivocal evidences of glaucoma apart from these ophthalmoscopic appearances (continued increased tension, pulsating arteries, shallow anterior chamber, enlarged anterior perforating view, etc.), it is extremely difficult to make a diagnosis. Schweigger pointed this out many years ago and furnished numerous instances where cases of simple progressive atrophy, accompanied by occasional doubtful increased tension, had been operated upon with disastrous results. I have seen a number of these cases of so-called "simple" glaucoma and have reason to suspect that the lack of faith expressed by many writers in the treatment (eserin, sclerotomy, iridectomy, etc.) of simple chronic glaucoma, arises, in some instances, from the fact that these cases partake much more of the character of simple progressive atrophy associated with congenital cupping of the disks, whatever that may mean, than of the symptom-group described by Dr. Risley as glaucoma.

Dr. S. S. SEABETTER of Birmingham—I would like to refer to the statement made a few minutes ago in regard to the frequency of the disease among the colored people, and the attempt to assign a cause for it. I live in a State where two-fifths of the population is colored and I can recall but one or two cases of glaucoma among colored people, while I think of quite a number of cases among the whites, and I hardly think the condition supposed exists.

Dr. C. F. CLARK of Columbus, Ohio—There is only one point I would like to hear more discussion upon and that is the extent of the iridectomy. It is an old question, but not entirely settled. I have seen a number of cases of good results from very small iridectomy.

Dr. LEARTUS CONNOR of Detroit—There are some facts bearing on the points raised by Dr. Reynolds that are worthy of consideration. I think it is proven that the conditions that Dr. Reynolds alluded to do make changes generally in the interstitial tissue and in this way interfere with the spaces between the anterior and posterior chambers, and knowing how this is done the remedy for it is easy. The reason I think that iridectomy may do this is that it opens up these spaces; I do not think it is the taking away of the iris at all, but that by removing it the obstruction in these spaces is removed and the fluid can pass through readily. As Dr. Risley mentioned, mas-

sage has produced these results. I have seen it myself, and some one has said that electric currents will do the same thing. I think it is desirable to try this also. From my own experience I think we have gone somewhat beyond theory and have some pretty positive evidence upon which to base a rational line of treatment, and in a general way Dr. Reynolds has fairly well stated the methods.

Dr. A. B. RANDALL of Philadelphia—A seeming paradox sometimes produces good results. In Risley's case we had a decided amount of reduced tension in the eye operated upon in contrast to the more usual condition between the exacerbations. We should bear in mind the evidence we have to suppose malnutrition to constitute a factor of very great importance, not always secondary, but often provocative. I recall very well a case that in some ways I might call a glaucoma with decreased tension, a case with both eyeballs soft and one absolutely mushy. I made use of iridectomy for the improvement of nutrition and was gratified with a fairly good result which in view of the fact that the other eye went on to a bad result, enables that man to make his living and even to read slightly with an eye that my colleagues strongly urged nothing could be done for it but enucleation. These paradoxes then might properly engage our attention and we may find some underlying interstitial changes that must always be taken into account.

Dr. G. EDGAR DEAN of Scranton, Pa.—I have read the paper that Dr. Connor refers to and since reading it I have made use of electricity in some of the cases in which iridectomy was not called for, and I have positively seen a very decided reduction of tension in the short time of ten minutes after the application of electricity by applying the negative pole to the eye and the positive pole to the head. I would call attention to the fact that the negative pole must be placed to the eye because I have seen cases in which there was increased tension produced by placing the positive pole on the eye; the direction of the current is important. The points which Dr. Reynolds brings out in regard to the internal treatment, such as the use of laxatives, Hunyadi water, etc., is also important, and I believe the use of salicylate of sodium and pilocarpin are very important points and should not be neglected.

Dr. HERMAN KNAPP of New York—In regard to the theory of glaucoma, that the ciliary body is probably at the bottom of it, is shown not only by cases of increased tension, but in sympathetic ophthalmia as well, but the glaucoma after discission is true experimental glaucoma and the bodies interfered with are the vitreous and ciliary bodies. The lens capsule has nothing to do with it and in those cases the angle is not only left but is increased; the iris is bulging in the center and retracted at the periphery, so there is no blocking of the spaces of Fontana. These two things should be considered.

Dr. D. S. REYNOLDS of Louisville—The point that I endeavored to emphasize was the fact that in the inflammatory forms of glaucoma the disease most likely begins in the ciliary muscle. We all know the predilection of the peculiar complex form of disease we call rheumatism for the connective tissues and the ligaments. Another point I wish to emphasize is that those of non-inflammatory development occurring in neurotic people are due in a large majority of cases to malnutrition. The other causes I could not consider in the short time at my disposal.

Dr. S. D. RISLEY of Philadelphia—There is probaby a distinct relation between the deep anterior chamber in glaucoma following discission operations, as pointed out by Dr. Knapp, and the presence of vitreous which clogs the spaces of Fontana.

ANGIOMA-MYXO-SARCOMA OF THE ORBIT, WITH REPORT OF A CASE.

Presented in the Section on Ophthalmology, at the Forty-eighth Annual Meeting of the American Medical Association, held at Philadelphia, Pa., June 1-4, 1897.

BY J. C. AYRES, M.D.
CINCINNATI, OHIO.

There is no locality of its size in the human body so rich in the various tissues which may serve as the starting point for the development of tumors, both malignant and benign, of the orbit. In it we have bone, periosteum, muscular tissue, fat, fibrous and connective tissue, glands and mucous membrane, and in the capsule of Tenon a serous cavity lined with a serous membrane. There is also the optic nerve and a liberal supply of blood vessels. Among the malignant tumors we find carcinoma, sarcoma, myo-sarcoma, and from the internal ocular tunics, melano-sarcoma and glioma. Among the benign tumors we find angioma, erectile tumors, fibroma, myxoma, lipoma, hydatids, serous and bloody cysts, dermoids, osteomata, papillomata, cysticerci and occasionally enchondroma. There are also tumors of the lachrymal gland and optic nerve, and aneurysms of the ophthalmic artery, both traumatic and idiopathic. The orbit is occasionally involved by disease of the ethmoid, the frontal sinus and the brain. The cavity is also of special interest to the general surgeon in concussions of the brain, fractures of the bone of the skull including the sphenoid or other bones which form the orbit and in cases where intra-orbital hemorrhages occur. Taken all in all it is a cavity well worth the careful study of the oculist as well as the general surgeon. This is my apology for presenting a rather rare form of orbital tumor.

Mrs. M., aged 64 years, was first examined by me in February, 1896. She stated that the tumor in the right orbit was first noticed eighteen years ago. It began in the upper and outer angle in the region of the lachrymal gland. Its development was very slow and painless and it was several years before vision in the eye began to fail. It has been in its present condition three or four years but is becoming more annoying on account of the enormous proptosis of the globe. The tumor fills the upper and outer portion of the orbit pushing the eye down. The proptosis is very marked, the eye being so far out of the orbit that the posterior portion of the globe is almost on a line with the bridge of the nose. The motility of the ocular muscles is unimpaired except by the great stretching of the muscles. The media are clear with the exception of the lens, in the lower portion of which is a small opacity. The optic nerve is atrophied and there is a large posterior staphyloma. The eye still retains slight perception of light. Under the skin of the outer angle of the upper lid can be felt a movable gland